

Date:  
User:Thursday, 5/4/2006 11:13:45 AM  
Kim Johnston

## Process Sheet

SPLIT-

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : SHUT-OFF VALVE ASSEMBLY  
 Job Number : 26954  
 Estimate Number : 12186  
 P.O. Number : N/A Part Number : D3469041  
 This Issue : 5/4/2006 S.O. No. : N/A Drawing Number : D3469 REV A1  
 Prsht Rev. : NC Project Number : N/A  
 First Issue : N/A Type : SMALL /MED FAB Drawing Revision : A1  
 Previous Run : 26482 Material : N/A  
 Due Date : 5/28/2006 Qty: 8 Um: Each  
 Written By : SEE COMMENT Below  
 Checked & Approved By : 06.05.05  
 Comment : Est Rev: A New Issue 06-02-03 JLM

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D3469043 TUBE ASSEMBLY



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3469-408	Tube Assembly	B 26985

043

2.0 D3470041 SHUT-OFF VALVE SHAFT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3470-041	Shut-Off Valve Assembly	B 3470-041

B 26986

3.0 D34705 PLATE VALVE



Comment: Qty.: 4.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
4	D3470-5	Plate Valve	B 26116

4.0 D34707 valve seal



Comment: Qty.: 2.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
2	D3470-7	Valve Seal	B 26988

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Date: Thursday, 5/4/2006 11:13:45 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHUT-OFF VALVE ASSEMBLY

Job Number: 26954

Part Number: D3469041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

D34709

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

Batch:

B 26387

6.0

AN3104

NUT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN310-4 Nut

M 19356

7.0

AN9604L

washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 AN960-4L Washer

M 14606

8.0

AN960416

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 AN960-416 Washer

M 5519

9.0

MS24665153

COTTER PIN



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

COTTER PIN

Batch:

M 19096

10.0

MS35206217

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 MS35206-217 Screw

M 13883

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/08/15  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 5/4/2006 11:13:45 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHUT-OFF VALVE ASSEMBLY

Job Number: 26954

Part Number: D3469041

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

NAS679A04

NUT



Comment: Qty.: 4.0000 Each(s)/Unit Total: 32.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 NAS679-A04 Nut

*M100651*

*FF 06-06-14*

12.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Assemble as per Dwg D3469

*06/07/11*  
*SB 06/06/15*

13.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Ensure Unit Opens and Closes Smoothly

*06.08.09*

14.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with a permanent fine point marker and Stock

Location:

*DB 06/08/14*

15.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

*06/08/15*

Job Completion



*CY 06/08/15*



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

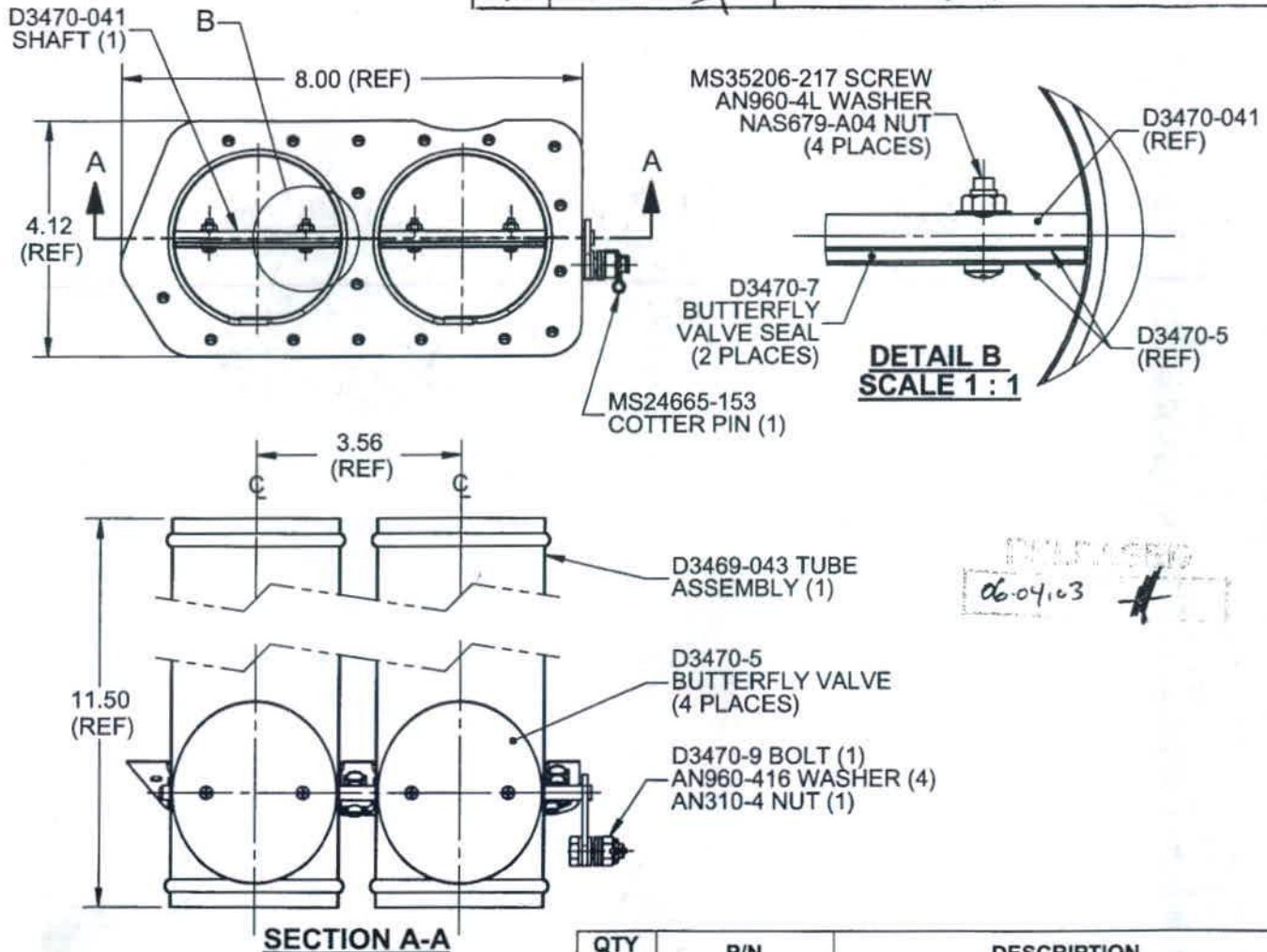
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3469	REV. A SHEET 1 OF 5
DATE 05.12.12		TITLE SHUT-OFF VALVE ASS'Y	SCALE 1:3
A	05.12.12	NEW ISSUE	
A1	06.04.2013	CORRECTED B.O.M. on PAGE 2	

**D3469-041 SHUT-OFF VALVE ASS'Y****NOTES:**

- 1) IDENTIFY WITH DART P/N D3469-041 USING FINE POINT PERMANENT INK MARKER
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3469-041	SHUT-OFF VALVE ASSEMBLY
1	D3469-043	TUBE ASSEMBLY
1	D3470-041	SHUT-OFF VALVE SHAFT
4	D3470-5	BUTTERFLY VALVE
2	D3470-7	BUTTERFLY VALVE SEAL
1	D3470-9	BOLT
1	AN310-4	NUT
4	AN960-4L	WASHER
4	AN960-416	WASHER
1	MS24665-153	COTTER PIN
4	MS35206-217	SCREW
4	NAS679-A04	NUT

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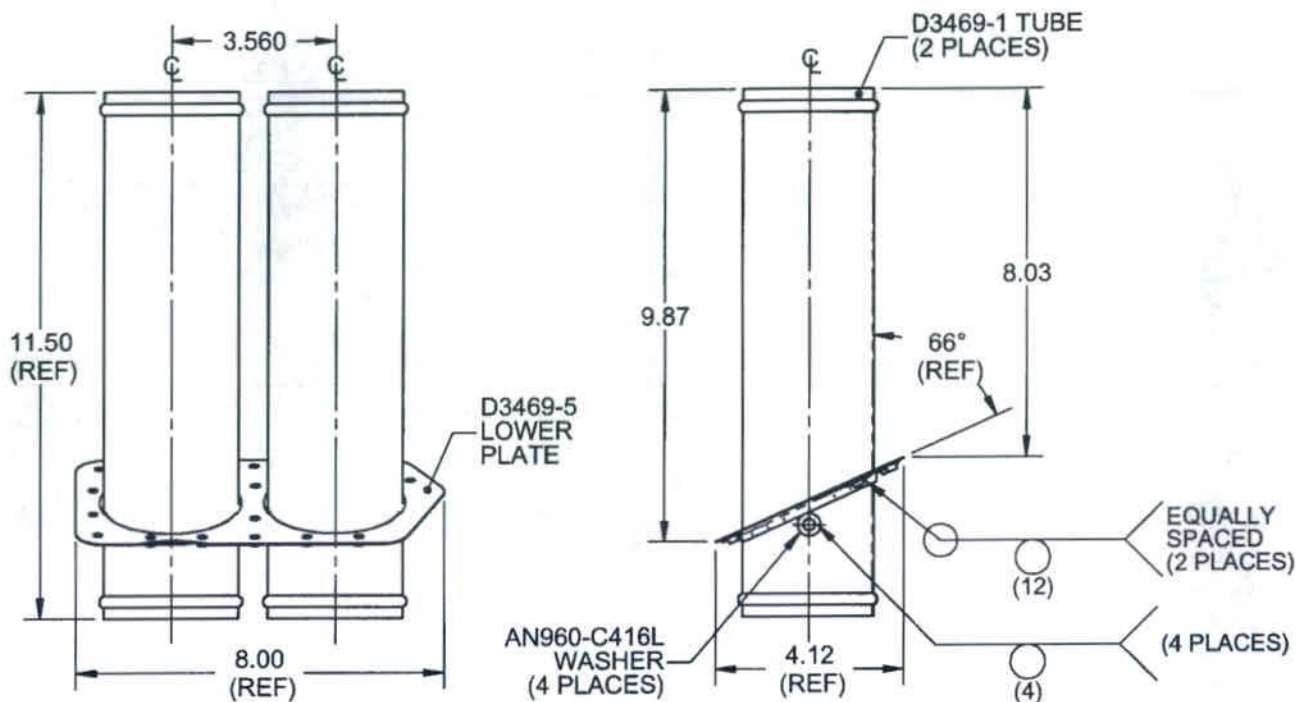




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DESIGN #B	DRAWN BY #B	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #H	APPROVED #H	DRAWING NO. D3469	REV. A SHEET 2 OF 5
DATE 05.12.12		TITLE SHUT-OFF VALVE ASS'Y	SCALE 1:4

# 06.04.02

**D3469-043 TUBE ASSEMBLY****NOTES:**

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -043	P/N	DESCRIPTION
X	D3469-043	TUBE ASSEMBLY
2	D3469-1	TUBE
1	D3469-5	LOWER PLATE
<del>4</del>	<del>D3470-5</del>	<del>PLATE VALVE</del>
4	AN960-C416L	WASHER

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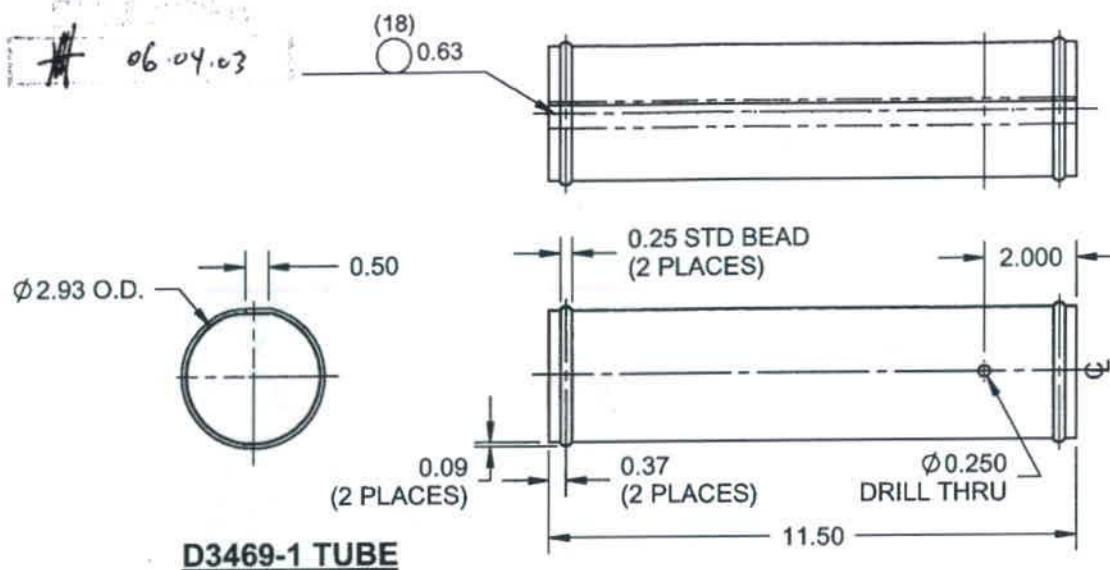
A1

26954



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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3469</b>	REV. A SHEET 3 OF 5
DATE <b>05.12.12</b>		TITLE <b>SHUT-OFF VALVE ASS'Y</b>	SCALE 1:4

**D3469-1F TUBE FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)  
(REF. DART SPEC. M304S26GA)
- 2) SPOT WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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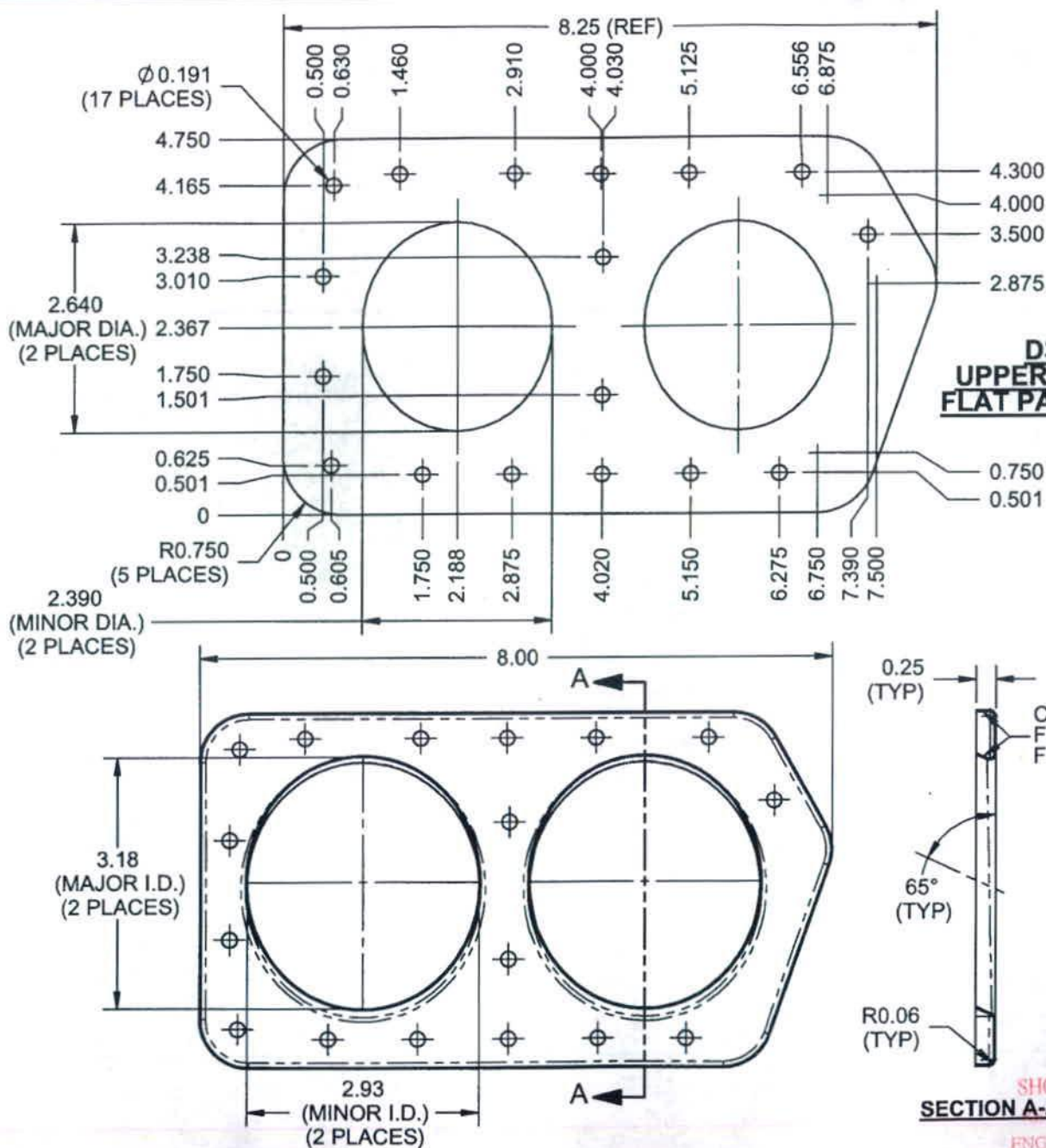
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DATE 05.12.12	TITLE SHUT-OFF VALVE ASS'Y		SCALE 1:2

**D3469-3 UPPER PLATE BENDING DETAIL****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) FINISH: NONE
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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NO. 26954

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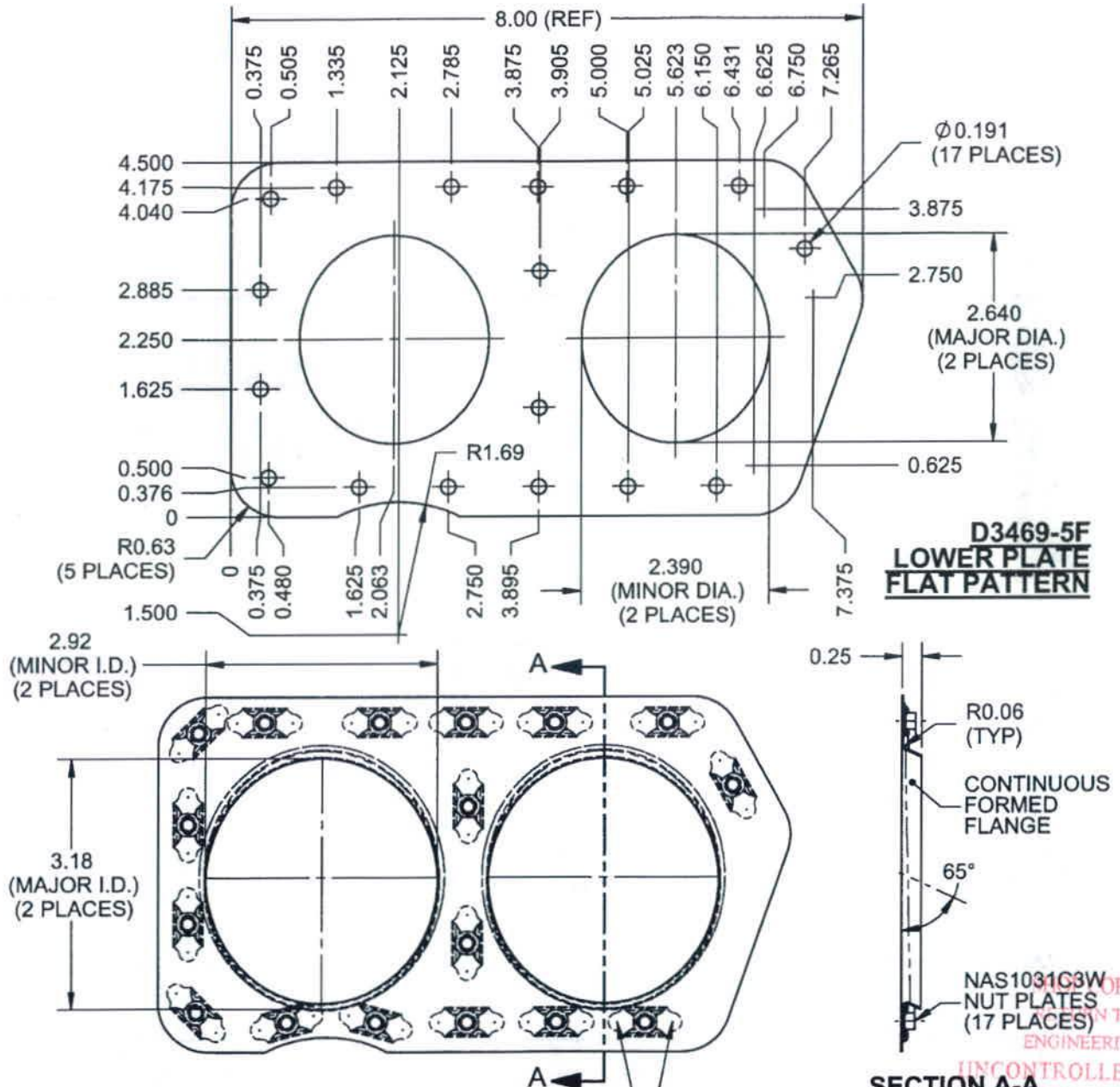
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3469</b>	REV. A SHEET 5 OF 5
DATE <b>05.12.12</b>	TITLE <b>SHUT-OFF VALVE ASS'Y</b>		SCALE 1:2

**D3469-5 LOWER PLATE****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
- 2) SPOT WELD NUT PLATES PER DART QSI 004
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

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